NC A&T BioEngineering

(Unofficial Community Colleges to NC A&T Curriculum)

Degree Earned: NC A&T Bachelor of Science in BioEngineering — Transfer GPA = 2.5

Effective: 2016-2017 — Grey Highlighted Courses – Take at NC A&T

FRESHMAN YEAR					
Com College	**Fall Semester**	**Credit**	**Com College**	**Spring Semester**	**Credit**
EGR 150	GEEN 100 Engineering Design & Ethics	2	BIO 111	BIOL 101 Concepts of Biology	4
MAT 271	MATH 131 Calculus I	4	MAT 272	MATH 132 Calculus II	4
CHM 151	CHEM 106 General Chemistry VI	3	PHY 251	PHYS 241 General Physics I	3
CHM 151	CHEM 116 General Chemistry VI Lab	1	PHY 251	PHYS 251 General Physics I Lab.	1
NC A&T	GEEN 111 College of Engineering Colloquium I [1]	1	ENG 112	ENGL 101 Written Communication	3
ENG 111	ENGL 100 Ideas & Their Expressions	3	NC A&T	GEEN 121 COE Colloquium II [1]	1
		14			**16**

SOPHOMORE YEAR					
Com College	**Fall Semester**	**Credit**	**Com College**	**Spring Semester**	**Credit**
	Social/Behavioral Science	3	MAT 285	MATH 431 Differential Equations**	3
MAT 273	MATH 231 Calculus III	4	NC A&T	GEEN 161 Comp. Program. for Engr. - MATLAB	2
DFT 170	MEEN 104 Graphics for Engineers	2	NC A&T	CHEN 218 Analysis of Chem Process Data	3
CHM 152	CHEM 107/CHM 117	4	CHM 251	CHEM 221 Organic Chemistry 1	3
NC A&T	BMEN 220 Intro to Biomedical Engr	3		CHEM 223 Organic Chemistry 1 Lab	2
				Social/Behavioral Science	3
		16			**16**

JUNIOR YEAR					
Com College	**Fall Semester**	**Credit**	**Com College**	**Spring Semester**	**Credit**
NC A&T	BMEN 310 Biomaterials	3	NC A&T	BMEN Bioengineering Lab	2
NC A&T	CHEN 3000 Fluid Mechanics	3	NC A&T	ECEN 340 Electrical Circuits and Systems	3
EGR 220	MEEN 230 Statics and Mech of Materials	3	NC A&T	BMEN 320 Engr Analysis of Human Physiological Systems	3
NC A&T	Molecular Biology	4	NC A&T	BMEN 311 Biomedical Imaging & Devices	3
PHY 252	PHYS 242 Physics II and Lab	4	NC A&T	BMEN 321 Biomechanics	3
			NC A&T	BMEN 322 Linear Systems in Bioengineering	3
		17			**17**

SENIOR YEAR					
Com College	**Fall Semester**	**Credit**	**Com College**	**Spring Semester**	**Credit**
NC A&T	BMEN 480 Senior Capstone Design 1	3	NC A&T	BMEN 481 Senior Capstone Design II	3
NC A&T	CHEN Thermodynamics	3	NC A&T	Open Electiv	3
NC A&T	BMEN 411 BioTransport	4	NC A&T	Advance Engineering Elective	3
	Humanities Elective	3	NC A&T	Advanced Science or Engr Elective	3
			ECO 251	Social Behavioral Science Elective	3
		14			**15**

NC A&T - Minimum Credit Hours Required for Graduation in BioEngineering	**125**

Major/Program Requirements and Footnotes:

* The CHEM 223 Organic Chemistry I Lab is a two-credit lab requirement at NC A&T compared to a one credit-hour lab requirement of CHM 251 at NC Community Colleges. This one-hour difference will be addresses once the student has transferred to NC A&T.

** A grade of "C" is required
[1] Course substitutions will be made for GEEN 111 for students with 16 hours of transfer credits and for GEEN 121 for those with 32 credit hours of transfer credits.

*** Statistics Elective
MATH 224, ECON 305, INEN 370, and CAEE 304